

STEM CORE

Foothill College | Spring 2017 | Issue 7



Photo of the Engineering club and STEM Core students on the LLNL field trip.

LLNL Tour On May 12th, STEM Core joined the Engineering Club for their tour of Lawrence Livermore Laboratory's National Ignition Facility. The one-hour guided tour gave the students a peek into the "world's largest and highest energy laser system." Scientists and researchers can use the laser beams to create intense temperatures of over "100 million degrees Celsius and pressures that exceed 100 billion times the Earth's atmosphere." Students on the trip were excited and fascinated with the laser, as well as the control room which was modeled after NASA's Mission Control Center. Thank you Ed M., for event planning and SVETP for the shuttle to Livermore.

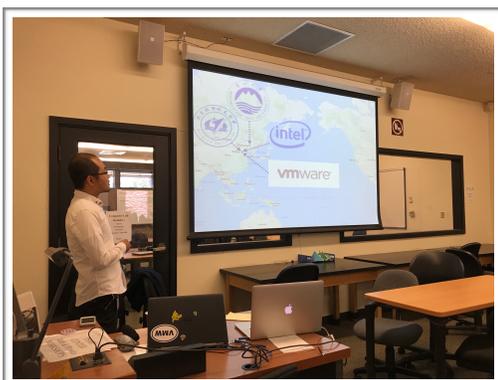
Spring Quarter Update Math 48C is the last pre-calculus course before STEM Core begins calculus in Fall 2017. STEM Core students in Professor Zach Cembellin's course are averaging slightly higher than non-STEM Core students in the same section, with the exception of quizzes 1 and 3, per the table below. The material continues to be challenging for several students in the course. In light of this challenge, the STEM Core team requests each student who scores below a certain threshold to meet with their instructor during office hours at least once per week or to attend a math workshop or meet with the study group. The study groups differ from the math workshops as they are lead by STEM Center tutor Melissa W. Students on the Computer Science pathway are beginning their pair programming project, where STEM Core students were paired together. A few weeks ago, the 7 students completed their CS midterm averaging a 73.5% as a cohort. While there's room for improvement, students have been consistently seeking assistance in the STEM Center's CS lab for onsite tutoring and lab help. The Engineering Technology pathway students will be presenting final projects during the last week of spring quarter. There are currently 14 STEM Core students remaining in the program.

Table Comparing STEM Core and Non-STEM Core students in Math 48C

STEMCORE	Quiz #1	Quiz#2	Quiz#3	Exam#1	Quiz#4	Quiz#5
Mean	0.7716667	0.768333	0.614286	0.75928571	0.517857	0.748077
Median	0.75	0.85	0.625	0.7825	0.4625	0.8
High	1	0.975	0.975	0.99	0.95	1
Low	0.475	0.475	0.225	0.41	0.125	0.25
n	15	15	14	14	14	13
NONSTEMCORE	Quiz #1	Quiz#2	Quiz#3	Exam#1	Quiz#4	Quiz#5
Mean	0.776	0.757955	0.664773	0.7213636	0.414286	0.682955
Median	0.775	0.725	0.725	0.7075	0.45	0.75
High	1	1	0.9	0.995	0.775	1
Low	0.275	0.375	0.225	0.415	0.075	0.275
n	22	22	22	22	21	22

Summer Internships It's official! As of June 1st, four STEM Core students have been placed for summer internships! Jessica D. and Kim K. have committed to a research assistant internship with Nissan's Renault Innovation Center, where they will be assisting a graduate student with autonomous vehicle simulations. Sabine H., and Jesse A. will be at Stanford's SLAC National Accelerator Laboratory researching crystallography and crystallization technology. Each student met with the Program Coordinator to develop resumes and prepare for interviews. Congratulations!

VMWare Guest Speaker On Wednesday, May 31st, Jinlu Yu, a software developer at VM Ware was invited to speak to STEM Core and aspiring STEM students in Foothill's STEM Center. Yu presented on his educational and career pathway as well as innovative VMWare technology. Jinlu was born and studied in Beijing, China before intensively preparing for a career with Intel and eventually VM Ware, where he had the opportunity to transfer to the company's Palo Alto, CA location from China. At the end of his presentation, Jinlu offered students interview and job preparation advice for a career in software technology. Thank you Andrea Ramirez and Jinlu Yu for taking the time out of your busy schedules to speak with our students!



Left to right, Jinlu Yu during his presentation and students in attendance at the event.

Student Spotlight Shayna G., joined STEM Core in Winter 2017. Unsure of her major, she enrolled in the program with the intention to take math and computer science classes. Not only did Shayna excel in both Math 48A, Math 48B and CS 1A, but she also found an interest in math, which is now her major. This quarter, Shayna continues to thrive in Math 48C and CS 1B while she works part-time and endures a long commute. Recently, Shayna interviewed the Program Coordinator for her English 1A essay on the topic of STEM Core as a beneficial learning community on campus.



Scholarships Three STEM Core students were awarded STEM scholarships for the 2017-2018 school year. Students were required to write an essay on their personal or financial hardships and request a faculty recommendation letter. Each students' essay showcased their diverse backgrounds and interest in STEM. Congratulations to Ed M., Jesse A., and Diego G. for this great accomplishment!

Questions? Contact Donna Miranda, STEM Core Program Coordinator at MirandaDonna@fhda.edu or visit www.foothill.edu/stemcore.